

2011 EDUCATIONAL EFFECTIVENESS SUPPLEMENT CETYS UNIVERSITY

1. EDUCATIONAL EFFECTIVENESS AT CETYS UNIVERSITY, AN INSTITUTIONAL PERSPECTIVE.

CETYS has had an interest in the accreditation process since just before NAFTA came into being in the early 1990s, anticipating that achieving standards of academic quality would be increasingly important both locally and globally. Since the accrediting process with WASC officially began in 2004, there have been numerous opportunities to improve the overall quality of CETYS while at the same time creating an emerging culture of evidence across the institution. In particular, this has meant seeking educational effectiveness through the achievement of the institution's objectives and educational purposes, which are reflected in our mission. In addition to reflections and improvements on the Syllabus-Student-Professor triad, the stages of educational effectiveness, which are linked to the WASC accreditation process, have provided CETYS University with a wider opportunity to reflect upon and evaluate its planning and strategic academic parameters and practices.

In response to the educational effectiveness framework, which the University has followed over many years and particularly in the past seven years, various challenges have emerged, which have required institutional innovation and change. The institution's focus on the syllabus, student, and professor has always sought student learning as its primary educational outcome.

In relation to syllabi at the undergraduate level, these had typically been reviewed and updated each time that a full cohort finished an academic program. In the case of syllabi of graduate programs, as the growth and maturation cycle is much more recent, processes have been different. Their revision and update have been less fluid, mainly due to insufficient full-time faculty at the graduate level who could carry out this difficult task in a systematic way. In essence, the WASC accreditation process has led to the acknowledgement by CETYS of responding to this important challenge that will help graduate programs from an emerging phase to one of consolidation and growth. As we are implementing CETYS 2020, the institution's long range plan, an important provision is the hiring of more faculty members for both undergraduate and graduate programs.

The opinions of employers of our graduates has always been a part of our curricular review process at both educational levels, and we also take into account important development trends of the local, regional, and national economy, always aiming at a resulting program and course syllabi that will be the most coherent possible with the career demands and job offerings. However, other than incorporating the feedback provided by employers and the results of follow-up studies of alumni, the revision of syllabi lacked a process that would lead the institution and its faculty to reflect with greater emphasis on the effectiveness of pedagogical practices, and their relationship to the learning achieved, retention rates, graduation rates and placement in

occupations or graduate school. Now, starting in 2010, a revamped program review process designed by faculty is being carried out. Said process was applied to five programs (4 undergraduate programs and 1 graduate program) and most importantly, we reached a point where faculty enriched the process with their self-reflections and analyses. The engineering programs reviewed represent 35% of all undergraduate engineering students; business programs comprise 34% of all undergraduate business students; and the MBA covers 40% of all graduate students. In addition, the institution has developed a timetable for the review of all other academic programs.

The framework offered by the WASC accreditation process for the review and revision of programs has provided the institution with a more holistic perspective and with greater depth. Despite the fact that the faculty recognizes that this program review approach leads to improvement in a systematized fashion, applying it in the context of CETYS University and as with any major institutional change has been a challenge and has proceeded at a somewhat slow pace. After 2 years of periodic review of academic programs, 5 out of the 22 academic programs of the institution have been reviewed and revised. The major challenges have been the University's ability to generate the reports of information and reports required by this process such as: graduation rates, retention rates, assessment results, growth trends, and best educational practices. CETYS 2020 seeks, through the accreditation processes, to improve and maintain the quality of education through continuous improvement. The process of regular, periodic review of academic programs provides the institution the academic space to develop learning communities required for each program to improve program quality and include innovative elements. The academies, which are learning communities comprised by CETYS faculty in specific areas of study and exist in each of the colleges, have become owners of the process.

Regarding students and their learning (knowledge, skills, attitudes, and values), institutional effectiveness has helped guide the faculty from an emphasis on teaching to an emphasis on learning. We believe that learning has occurred when students are successful in their classes and as alumni; when professors have demonstrated excellence in pedagogy; and when students provide positive evaluation of their professors at the end of each semester. The information obtained from these end-of-course-evaluations helps the institution maintain a faculty that achieves educational effectiveness.

The approach traditionally followed by faculty to facilitate learning did not have its own formal element of assessment as understood and espoused by WASC. It consisted of grades awarded for work done in each class and in some cases student portfolios of their academic work. If the student received passing grades, the inference was that learning was taking place and that the student would eventually finish the degree. CETYS has learned through the WASC accreditation process that assessment is a mechanism for verifying to what extent and magnitude learning is taking place, the learning that as an institution we expect of our students. Clearly, CETYS faculty has been sensitized more on this process. Now at CETYS, evidence of student learning remains stored in the institutional e-portfolio to be analyzed by internal and external

agents. The institution ventured for the first time in the e-portfolio in 2009 with the support of an expert from the School of Education at Stanford University (Dr. Paul Kim).

In general, our faculty understand the reason for a major focus on assessment. Nevertheless, some still perceive it as additional work, away from what how they traditionally approached teaching. Faculty members at CETYS University, as has historically been the case at most universities, were used to preparing their own courses, teaching it in the classroom, assigning homework to students, reviewing students' homework and giving feedback, testing students on the topics they taught, and evaluating (grading) their performance. From 2008 onward, when the institution began emphasizing student outcomes assessment and integrated it into the work of faculty, professors at CETYS University have been carrying out assessment, both academic and institutional, defined learning outcomes in a collaborative way, developed the rubrics or required assessment instruments collaboratively, developed assessment logistics that identify the points at which assessment should occur, and required students to place their learning products in the institutional e-portfolio as evidence of what they know and what they can do. Faculty also will explore, both individually and in groups, the results so they can use them to improve both student success and faculty teaching.

Implementing student outcomes assessment has not been an easy task, particularly with graduate programs. CETYS University formally began this activity in 2008 with the assessment of four institutional learning outcomes, and since the initiation of this process, the graduate program was included in the curricular mapping for assessment purposes. Graduate program adjunct faculty were trained along with the undergraduate faculty, but at the time we implemented the assessment process for undergraduate learning outcomes, the process was delayed at the graduate level because more training was needed to understand the process in a holistic manner and required a greater faculty involvement. It was not until 2011 that the graduate program began to place learning products in the institutional electronic portfolio. This situation has caused faculty and their leaders to develop strategies and policies to increase faculty participation in this process, to exploit the advantages of assessment, and to achieve with systematic training its acceptance in a positive and convincing way by the graduate faculty.

This is an imperative of CETYS 2020, which also in addition to institutional accreditation seeks relevant international program accreditation (e.g., ABET, ACBSP) for business and engineering. Inherent in these programmatic accreditation processes is the use of student outcomes assessment as well as the extensive use of data and statistical analyses, as required by WASC. We believe that CETYS has made great strides in these processes. However, there are areas of opportunity that are being addressed such as the creation of data and statistical reports by academic program, something which was not done in the past. Now, faculty are developing a culture of evidence that includes the use of data and statistics and is learning to use this information, according to the requirement of the accrediting body, for the improvement of academic programs and student learning.

Continuing with faculty, the institution has documented their effectiveness through systematic evaluation of their performance through a faculty evaluation and compensation system (SERP). The current version of this system evaluates the performance of faculty in teaching, service to the institution and community, and in professional development activities that lead to updating in the discipline/profession. Out of these three elements, teaching carries the most weight; including in the teaching of the humanist and holistic emphasis of the institution. There have been various internal structures (e.g., Didactic Center, Director of Faculty Evaluation, Director of Curricular Design, and the Center for Development and Academic Improvement) at different times in the life of CETYS University for the evaluation of faculty that have generated faculty-training programs aimed at making the educational model of the institution fully operational. The connection between the results of the faculty evaluation and the compensation system as well as the faculty-training programs influenced by the WASC accreditation process, and the recommendations arising from this process (Assessment, Development of a Culture of Research and the Review of Academic Programs), have led to modify, starting from 2008, the content of these training courses and workshops for faculty.

Student outcomes assessment, periodic review of academic programs, and development of information skills and learning workshops have been offered as part of the faculty development program. The University has invited external experts to lead these workshops, including Dr. Mary Allen (assessment), Dr. Marilee Bresciani (program review), Dr. Gloria Rogers (assessment), Dr. Paul Kim Stanford University (e-portfolio), and in the area of library, Dr. Susan Parker (UCLA) and Gabriela Sontag (California State University - San Marcos).

Without a doubt, as a result of the WASC accreditation process, the academic processes at CETYS have improved and continue to improve. However, the primary reason for these changes has been that the institution has become fully convinced that providing faculty with the necessary competencies to improve student learning and applying the best academic practices has resulted in greater educational effectiveness.

Adopting the discipline of reviewing programs and processes and with a systems approach on educational effectiveness, has been challenging as it requires specific flows of information, coordination in the implementation of initiatives and projects, as well as a simple metric that will generate the necessary feedback for determining what should be improved. The WASC accreditation process has helped CETYS University to efficiently evaluate its educational purposes. Despite the fact that this accreditation process has expanded how we review and evaluate the educational effectiveness of CETYS, through this process we learned that it is necessary to have a more integrated and efficient data collection system, so that both academic leaders and faculty receive this information, resulting in having a greater awareness of the various and numerous processes that are interconnected and associated to the course, faculty, and to student learning. As a result of a recommendation by WASC evaluating teams that the institution should improve the use of data and information, in the spring of 2011 the

institution started the new information system (SICU). This system of integrated data provides evidence in the areas that reflect the quality of education and the areas of improvement; the area of technology has set its purpose on training the academic and administrative staff in the use of this system and the kinds of reports that can be generated.

It is very important to mention the effect that the WASC accreditation process has had in the strategic development of the Library, for example. The development of the 2007-2010 Library Strategic Plan included very important measures as a result of WASC's recommendation that we visit other libraries and we visited the libraries of several universities in the United States (San Diego State University, National University, University of Arizona, Cal State San Marcos), in addition to the support and advice we received from Dr. Susan Parker of UCLA. The Library had been one of the few departments or units at CETYS University that had developed a Strategic Plan of their own. This speaks of institution's interest in and commitment to having the Library play a more important role in the teaching-learning process at CETYS, not only the Library as such but the role as well of the librarian and the relationship with the academic community.

The visit to U.S. libraries, the advice of Dr. Susan Parker, and the recommendations of the WASC team have helped CETYS' librarians design strategic objectives that had not been raised initially in the Plan, mainly in qualitative and intangible points: the question of collaboration and support with the academy, information literacy, library staff, and the evaluation of services because more quantitative and tangible issues had been considered (e.g., collections, physical spaces, services, and technology).

The libraries of CETYS University had always complied with their main function: to acquire materials that support the different courses. As a result of the WASC process there was a shift to a more dynamic and academic role, which led to the 2007 Strategic Plan. The WASC accreditation process provided us with new learning opportunities and opened other unknown borders. Since then, CETYS University has been solidly supporting the different areas: collection, infrastructure, information literacy, collaboration with staff, staff development and professionalization, technology, and evaluation of services. While we still need to strengthen and systematize some actions, our current priority focuses on the relationship of library-professor-student, for which we launched a Linkage Academic program with the Library in 2010 (Portfolio of evidence # 74).

Improvements that have been carried out across the CETYS' Library system during the WASC accreditation process include, for example, the following:

- A new Campus Library in Ensenada that is open to the community
- New equipment for the libraries on all three campuses
- Reconfigured and remodeled library space and new equipment to house CRAI (Resource Center for Student Learning and Research)

- Professional training for the Library Directors
- Development of academic information skills
- Review of courses/workshops, training of users, and of printed and digital information resources
- Evaluation and analyses of current librarian profiles
- Organizational restructuring
- Joint work with the academies and the library through the academy library linkage program
- Design of various instruments such as a blog, tutorials, guides, and “your library in Blackboard”, which allow the development of different skills among faculty and students.

Our library staff, like the faculty, has learned to undertake a self-review of their service work to the CETYS learning community, and it was the WASC accreditation process that led them to:

1. Acquire awareness on the diversity of their clients and their particular needs, sharing the same space and resources in an interactive learning community.
2. Understand that the mission of a librarian was not only oriented to service per se but of commitment of serving with upgraded technology, with social and academic skills, and to demonstrate positive leadership toward the changing needs of a globalized environment.
3. Learned that they should have efficient and effective evaluation tools, and the spirit of improvement arose throughout the library staff.
4. Learn how to better use the data and information generated by the tools mentioned above, with the purpose of improving productivity of the spaces, the services, and the library resources.
5. Have the libraries at the three campuses learn to work as a single unit in its strategic plan, and as a single community of learning oriented to the service of the academy.
6. Provide the Library a more effective presence before all the internal and external audiences of the institution.

Throughout years of growth in infrastructure, technology, faculty-student training, of global learning, continuous improvement, learning outcomes, etc. of our libraries, we have been aiming at the creation of a new, integrative strategic plan for the libraries to function as a single entity, an aspiration that is now reflected as part of CETYS 2020.

2. MEANINGFUL INVOLVEMENT AND ANALYSIS OF THE EDUCATIONAL EFFECTIVENESS.

The analysis of educational effectiveness at CETYS University has gone through several stages. In each stage the interest has focused on the documentation and analyses of various areas such as retention rates, drop-out rates, curriculum taught by full-time faculty, faculty evaluation, student grades, and student participation in co-curricular activities. The degree of involvement of faculty, academic directors (School Directors, coordinators of academic programs, College Deans, Vice President for Academic Affairs, and their staff) and administrative (President, Vice President of Administrative Affairs, Directors, and IT) was influenced by their role in each of these stages: provide academic information, analyze the academic information and suggest recommendations to improve the value of metrics in particular, or to make decisions on how to improve the quality of education offered by the institution. CETYS University has refined its metrics to evaluate its educational effectiveness through key indicators, including a set of academic indicators, through which the Board of IENAC is informed not only about the educational effectiveness of the institution, but also on strategic and financial goals.

Such report of educational effectiveness that was initially every six months is now annually and includes other indicators of educational effectiveness such as fluency in English of students during and at the end of their undergraduate degree, percentage of students who participate in academic exchange programs, student performance on standardized tests, and the productivity of faculty in research and publications. This effort has been led by the President and his staff, and the results are an important piece in the development of the Annual Report sent to IENAC.

The WASC accreditation process and the response by CETYS have substantially redesigned how the University documents the educational effectiveness of the institution. The incorporation of the assessment processes and periodic review of academic programs, as well as other recommendations of WASC, particularly the one relating to developing a culture of research and evidence, have led to greater participation of faculty in the analyses of educational effectiveness because the faculty should not only carry out assessment (Institutional and of Academic Program) but it also must interpret the results and evaluate the learning achieved by students. The faculty is currently in this phase. For example, if we have found at the institutional assessment level that 40% of the undergraduate students have an "outstanding" capacity for oral and written communication in Spanish (ILO's), what will be done so this percentage can be increased? What is a reasonable goal in this institutional learning outcome for the next assessment cycle? If from all the undergraduate students who participated in the institutional learning outcome of Critical Thinking (ILO3), 16% obtained a rating of "outstanding," what do we have to do to increase this percentage? These types of questions are being discussed now by faculty, and are the kinds of questions that guide academic improvement and institutional effectiveness.

In addition to faculty, the Information Technology staff of the campuses also has been involved in the assessment process. They developed the institutional e-portfolio whose initial version (2008) continues to be refined with faculty input. The Information Technology staff and the Center for Development and Academic Improvement (CDMA) jointly train the faculty in the use of technology and support the assessment that faculty guides. In this way these areas of support have been involved in the review of the educational effectiveness of the institution.

The directors of colleges and schools, in conjunction with Vice President of Academic Affairs, know that the average faculty evaluation for the undergraduate programs has been maintained in the past two years at about 83% (Maximum Evaluation = 100 %). Is that the desired performance? What is the desired level for this indicator? What are the implications of such a level of faculty evaluation? Discussion on this and related matters are undertaken by the faculty of CETYS. Currently, staff from CDMA, Information Technology from the Mexicali Campus, the Faculty Evaluation Committee, and from the Academic Advisory Council work with the Vice President of Academic Affairs to include the three functions of faculty in faculty evaluations: Teaching, Service, and Research. How many projects of systemic impact can the institution implement at the same time? This is a key question among the senior staff of the institution.

The budget to support the periodic review of academic programs was allocated from the moment it was agreed to respond favorably to the WASC recommendation to undertake such reviews. What affected the implementation of this process? How many programs may be revised in the next cycle? What opportunities for improvement stem from the 5 programs already reviewed? What can be implemented to improve the operation and quality of these academic programs? What can be improved in the implementation of the process of reviewing academic programs? These are questions that the directors of the colleges, the directors of the schools, and the faculty academics themselves have generated and addressed as a product of the implementation of the review of the programs.

Without a doubt this process has been the one that has most required the various areas of the institution to work together, to expand the portfolio of information required, and to review the educational effectiveness of the institution. If the retention and the graduation rates were calculated before only by campus, today they also are calculated by gender and by the level of academic program, for example. This is thanks to the joint work of the departments of Data Processing, Institutional Effectiveness, Planning and Academic Effectiveness, and Academic Operation, which resulted in the CETYS University Information System (SICU). This system is the main hub and supplier of academic information to support the process of periodic review of academic programs. It is also evidence of how different levels and areas of the institution are involved in the review of educational effectiveness of the institution and the creation of their supporting infrastructure. The great challenge that the academic community faced was the organization and planning required for creating spaces for analysis, reflection, and discussion of the information contained in the data portfolio for educational

effectiveness. The Centers of Student Development (CEDE) handle more detailed information on graduation, and the academic programs will contribute to improving the current graduation strategies and eventually the retention and graduation rates.

Cognizant that not all the student's education occurs in the classroom and that the co-curricular activities have an important weight (Globalization, Entrepreneurship, Humanism, and Values, Linkage with the Community) in the operation of the educational model of CETYS University, the institution has initiated a process of measuring the learning in the organizational structures that provide this type of education. The first support units initiating this process were the libraries of the institution, which are currently pilot testing their assessment tools. This is another example of how an area of support for students and faculty is directly involved in the education of students and contributing to institutional educational effectiveness. There is already a plan for the review of other areas (International Programs, CEDE, Student Services, entrepreneurs, etc.) of service to the student and faculty that are beginning to carry out assessment.

Influenced by the WASC accreditation process, the evaluation of the educational effectiveness of CETYS University has been enriched, clarified, and focused. Now it affects areas that go beyond the academic and whose involvement is necessary and important. The great challenge is that the academy of CETYS is working on integrating and consolidating the capacity and skills of the staff in all areas to be able to analyze the growing portfolio of information of academic effectiveness and be efficiently prepared with such information to carry out improvements that have a positive impact on learning and student success, faculty pedagogical competence, and the innovation and competitiveness of the academic programs.

3. ANALYSIS OF THE EFFECTIVENESS OF OUR PROGRAM REVIEW PROCESS.

This section is composed of two parts -- a set of reflections of the members of the faculty who participated in the first cycle of program review, and conclusions which identify the learning achieved through the program review process. These conclusions identify the path that CETYS will follow in future reviews of its academic programs.

Faculty reflections who participated in the regular review of programs

The review of academic programs at CETYS University had a perspective and a framework for institutional reference. Such a review followed the established requirements of the official bodies of education in Mexico, and academicians participated in the review process. The last review that reflected Educational Reform at CETYS was in 2004 (evidence presented in the first WASC visit of educational effectiveness in 2008).

The WASC accreditation process has led us to evaluate the review processes for programs which we had been carrying out, and to complement them in a meaningful way with an approach that is focused less on descriptive documentation and more

toward a profound analysis of quantitative data and identification of areas of opportunity and improvements for the strengthening of the teaching-learning process, and always as the central point the achievement of meaningful student learning. In this sense, a process and institutional policy are defined, which are then taken by the faculty of the respective Colleges and nuanced to what the programs in each academic area require in terms to review.

However, it is sometimes easy to forget that the best way to avoid the mistakes of the past is through the objective analysis of the evidence and the achieved results. Unfortunately, sometimes it is more attractive to leave the review process and begin by proposing solutions to the problems perceived by the personal vision of faculty. It was necessary for the WASC accreditation process to establish the review of academic programs as a significant recommendation, with the suggestion of taking advantage of the framework of reference for the WASC program review.

The process of program review (2010), which is the first one that CETYS followed based on the WASC frame of reference, showed the presence of divergent faculty views and interests, which had to be balanced with the learning needs of students, academic programs, and the institutional goals. This framework was the element of control that helped us develop the review of programs in a structured and efficient manner.

Achievements resulting from academic program revision, following the framework recommended by the WASC accreditation process.

Learning:

- Faculty took the process of review of programs and they made it their own. They defined it, decided how to do it, received training, support, and guidance from external experts. This helped to create a synergy, groups of faculty gathered in Academies worked with a simple and effective model; in the process of defining this model of review of programs, spaces and moments of analysis were created regarding academic programs, and generated documents that more than just described the program but identified the specific elements for improvement of each academic program that is subject to this process, resulting in a specific action plan.

Between the complementary components that had not previously existed in a systematic way in our program reviews, is the capacity to be able to have information for analyzing assessment, which we now have for both the institutional and program level; although in the case of the latter, there are still areas of important opportunities to improve the process. What emerges as something very positive is the learning generated, and the ownership of the processes by the faculty.

Learning outcomes Focus:

- WASC's focus on learning outcomes forced us to consider the quality and relevance of faculty, courses, and equipment as a function of the learning achieved by students. Therefore, the process of reviewing programs demanded that the academic and administrative staff validate their metrics or standards of quality, as well as the processes of collection, organization, analysis, and the dissemination of information. At CETYS University, this approach led those involved in the process of reviewing academic programs to:
- Question processes and practices that have been used in the past to guide decisions on curricular development, evaluation, and evidence of learning.
- Long-term Planning based on the expected results in students (or graduate profile) rather than an emphasis only on faculty, courses, and equipment.
- Review the achievement in the learning of the students as part of the activities of faculty and documenting the main findings.
- Identify areas of opportunity and to propose strategies for improvement based on an objective analysis of evidence of learning.

Decision-making:

WASC requires closing the loop in the process of reviewing programs and showing evidence of this; i.e. it requires visible improvements in the teaching-learning process that come out of the review of programs. Faculty received support from the directors and managers of the institution to carry out this work.

There are still areas of opportunity. This does not mean that we have not generated considerable improvements in the institution; for example, investment in the libraries of the three campuses, the creation of new faculty positions, the implementation of Centers of Excellence, and faculty development programs are evidence of the progress generated by the WASC accreditation process.

In this new stage of review of programs, a process in which all the professors participated within their academy, faculty became the owners of these reviews. All faculty members have understood and participated in the activities defined, having both voice and vote on decisions.

Culture oriented toward results and evidence:

Faculty involved in the process of program review now begin to develop their syllabi based on learning outcomes and align them with their evaluation criteria and contents of

the course. That is to say, faculty understand the importance of setting measurable objectives of learning for their students and to evaluate them in such a way that not only would enable them to assign a rating, but also helps them to encourage reflection on the part of students on what they have learned and its application. In this way, we started to create a culture where the quality of teaching is analyzed according to demonstrable student learning. In other words, the faculty culture at CETYS University has become a culture of "accountability."

Supporting Areas:

For all the work on program reviews, the faculty was supported by School Services, Center for Academic Improvement, Library, IT, Academic Promotion, Institutional Research, and Alumni.

These areas of support generated data, and these data were requested and utilized by faculty which allowed them to make clearer analyses of educational effectiveness, controlling for inherent faculty biases. For example, a professor cannot undertake an analysis of graduation, retention, and drop-out rates without the access to an information system created by a support area. In this way it is clear that certain administrative departments are an essential part of the faculty's work and ultimately the training of students.

- **More active participation of the faculty toward continuous improvement:**

The active participation of the faculty in the academic program review process of Industrial Engineering, for example, gave them an opportunity to learn various things, including being the first to understand that it is a process of continuous improvement, which allows them to identify areas of existing opportunities in a holistic manner in the courses as in all aspects that make up their academic duties. This provides them with a global vision that facilitates critical analysis by identifying the actions needed to strengthen the educational effectiveness of undergraduate programs of CETYS University.

- **Review of programs, a systematic process:**

The process of reviewing academic programs allowed faculty to have a systematized methodology and to take advantage of the different results of studies and reports generated by different areas of the institution, such as results of the EGEL exam issued by the National Center for the Evaluation for Higher Education, A. C (CENEVAL), a satisfaction survey of employers and alumni, school statistics, reports from the centers of student development (CEDE's), among others.

- **Major institutional improvements:**

The process of revising programs facilitated the identification of important institutional improvements to identify areas of opportunity related to the process of early intervention in technological, sustainable, and entrepreneurial development.

Learning Activities, previously considered as co-curricular, have been integrated in the curriculum by having much more affinity to the institutional mission.

Additionally, the creation of new Centers of Excellence has been strengthened and new learning options for students through the permanent and systematic partnerships will open up through faculty and the generating agents of technology and wealth in the region.

- **Learning Objectives.** As part of the work done by faculty in the process of reviewing programs, they carried out the respective mapping to their selected program, which includes the learning objectives; this clarified many doubts in the faculty and gave them an opportunity to exchange interdisciplinary points of views and of enriching with an in-depth analysis this process with the direct approach to the educational effectiveness of the contents of each course.
- **Rubrics.** Faculty defined their rubrics, shared them with the participant academies in this review process, and once again, the interdisciplinary opinions enriched the design which we were able to improve on several occasions. Additionally, the implementation and use of rubrics generated an effective outcome.

CONCLUSIONS:

A deep reflection expressed by faculty members, a product of the review process of programs, was that the process made them think seriously whether the students were really learning what they were teaching and if in reality their work in the classroom was being effective. This analysis was able to reach this depth after many meetings of the various faculties, for exchanging views, for analyzing and modifying the process of reviewing programs, and for having had the opportunity of participating in three workshops that the institution offered to the faculty on this topic, for which an expert, Dr. Marilee Bresciani, was hired (2010 and 2011).

Having completed the first cycle of program review, it was concluded that:

- (a) A greater participation of the faculty was recorded in comparison with previous initiatives. Faculty were the leaders and the owners of the process, and the main focus was on the learning and success of students.
- (b) This program review process was perceived among faculty as an "accountability" process, and as another learning experience that the WASC accreditation process leaves behind.
- (c) In spite of the difficulties experienced in the implementation of this process, the faculty is convinced that it must exist because previously the process was very prescriptive and it was very useful for them having the opportunity of questioning it. Faculty realized that undertaking a systematic process of program review, with a clear and effective methodology, allowed them to convert the academic programs into programs with greater educational effectiveness.

- (d) The participation of the support areas was increased. Having involved the areas of support in this process was a significant step forward in recognizing the shared responsibility that both academic as well as administrative areas have in the process of achieving educational effectiveness.
- (e) Each one of the program reviews that was generated in this first review cycle (Industrial Engineering, Computer Sciences Engineering, Marketing Administration, Business Administration, and the Master's in Business Administration) established action plans. The Deans of Colleges have requested the support of the Vice President of Academic Affairs in order to achieve the recommended improvement in these academic programs. Each of the Colleges has established its timetable for reviewing the programs that have not yet been reviewed (portfolio of evidence # 80),
- (f) The understanding of a culture oriented to results and evidence within a learning community was strengthened.

Self-Recommendations.

CETYS University needs to keep on track the academic program review process established in the schedule for each College. The learning obtained in this first review cycle is documented; faculty accepted the process and it was adopted as "best practice." This learning will serve as support to formalize the review of the rest of the programs.

It is essential that the faculty continues training in this process because for future reviews it is necessary for them to comprehend and understand the methodology and to maintain their leadership role in the process.

CETYS hopes to establish an institutional policy to facilitate and promote the exchange of information between academic, administrative, and planning areas in a systematic and cyclical manner. This will help the assessment results, which is already understood as an essential part of the review of programs.

4. EFFORTS TO PROMOTE DEVELOPMENT OF STUDENT SUCCESS

CETYS University, in the framework of educational effectiveness required by WASC, has been given the task of analyzing the most **significant** trends in terms of retention, and graduation, the latter at the completion of four and six year cycles, as appropriate. In addition to this information, an analysis has been made of enrollment trends, and finally, an analysis of the current financial situation and how it has affected the institution.

Trends in Retention Rates

1. First Year Retention.

- **Mexicali.**

As shown in the table (DATA TABLE section # 3) the percentage of students enrolled in the third semester, remain very stable over the past 6 years ranging between 89%

and 92% with an average of 90%, consequently, the drop-out rates of the same periods show an average of 10%.

- **Tijuana.**

With the same percentage as Mexicali (90%), but with a variation that is between 85% and 91%.

- **Ensenada.**

The retention percentages of the first year vary between 74% and 95% with an average of 85%.

At the system level, Mexicali and Tijuana were both 90% with a small variation (3%), while in Ensenada shows lower results (85%) with a larger variation of 21%.

Both in Mexicali and Tijuana, for many years there have been formally established departments responsible for providing academic and non-academic support for students (CEDES), while in Ensenada they have been formally constituted since two years ago, with more financial and human support, and as can be seen, retention rates have improved (79% and 92%).

Trends in Graduation Rates:

1) Graduation (terminal efficiency) at the sixth year.

- **Mexicali.**

69% for cohorts for the years 2004 to 2010 and 2005 to 2011.

- **Tijuana.**

60% in the last two cohorts.

- **Ensenada.**

52% for cohorts for the years 2004 to 2010.

In Mexicali, the graduation rate or completion rate of 69% for the sixth year is considered as good, because CETYS 2020 sets 70% as a goal for 2020.

In Tijuana, although not as high as Mexicali, 60% is a reasonable rate, considering that at a national level in Mexico has an index below 50%.

In Ensenada the rate is under 52% a year, considering only one year of information, since the data is from the cohort that began in 2004.

The challenge for both Ensenada and Tijuana is to match the Mexicali Campus and meet the institutional goal of having a 70% in 2020 or earlier.

2) Graduation (Terminal Efficiency) at the end of the fourth year.

- **Mexicali.**
55% with a range between 48% and 62%.
- **Tijuana.**
46% with a range between 35% and 56%.
- **Ensenada.**
35% with a range between 33% and 38%.

Out of our three campuses, the greatest challenge lies with the Ensenada Campus, which has the lowest rate with 35%.

Considering the three campuses as a system and using a weighted average, we have a first year retention rate of 89.3% and a sixth year completion rate of 62.5%.

With regards to the CETYS 2020, this is acceptable since the goal is that by 2020 we should have a first year retention rate of 90% and a sixth year completion rate of 70%. We believe that both can be achieved, because the CEDES have been reinforced at all three campuses and academics (teachers, program coordinators, school deans and academic deans) are heavily involved in strategies to improve retention rates and completion rates. With the support of information regarding student follow-up, generated by CEDES and working in an integrated manner with academics of the three campuses, it is expected that this improvement effort will work effectively.

Enrollment Trends.

From 2006 to 2010 (data tables) undergraduate enrollment in the three campuses decreased slightly, going from 2394 to 2292, a 4% decrease. However, in the last two years, it grew by 3% (2218 to 2292).

Graduate enrollment in 2006 to 2010 went from from 1287 to 1363 students, an increase of 6%.

CETYS University and the Current Financial Situation.

Financial stability has been maintained over the past two years in the CETYS System because CETYS has increased tuition revenues at least at the same rate as inflation, financial prudence and discipline have been exercised, there has been a prioritization of expenses, and greater support has been received for scholarships in particular through the State Government, the CETYS Lottery (i.e., Sorteos), and reserves from operation flows from previous years.

A very important event in April 2010 was the earthquake that shook Mexicali. While the prevailing and overriding priority was the safety of our students, faculty, and staff, CETYS benefited from having a learning management system (Blackboard) that helped minimize the loss of class, as only a couple of days after the quake more than half of all students had already resumed their classes via the web. Through the optimization of class schedules and usage of existing such as the leasing and later purchase

classrooms plus the leasing first and then the purchase of mobile classroom of top quality and design, the Mexicali Campus has been able to continue serving its students, while proceeding with prudent and safe long term solutions to the two buildings that were impacted by the quake.

In the case of the two damaged buildings, after a lengthy process the institution was able to recover almost totally the amount for which said buildings were insured. For structural engineering and safety reasons, one of the buildings had to be demolished. The institution is now reviewing alternatives that would not only reconstitute classroom and office space impacted by the earthquake but also to move forward with an update and enhancement of buildings and equipment as well as potential new buildings that would position the institution in line with what CETYS 2020 indicates in terms of the future physical development of the Mexicali Campus. A tentative date for the re-inauguration of said classroom buildings is January of 2013.

5. AN UPDATED DATA PORTFOLIO

In response to the requirements of WASC's reference framework of educational effectiveness, CETYS University has included in the 2011 effectiveness report an updated version of the Summary Data Form (2011), and separately in the Data Tables 2011, an inventory of indicators of educational effectiveness (Data Table 7.1) and the Inventory of Concurrent Accreditations (Data Table 8.1).

By analyzing the most outstanding student **assessment** activities, we have included in the report of educational effectiveness as evidence the results of CENEVAL, as evidence of indirect assessment (portfolio of evidence # 32). In these evaluations at a national level, we can see that there are areas of opportunity for our academic programs. We have learned to appreciate the results of CENEVAL, as a source of information for academic programs, and specifically as a resource for benchmarking at the national level. By means of these results, CETYS knows the status of its students when concluding their academic program in the institution and is aware of the "strengths and weaknesses" in the performance of students by area of knowledge. In addition, this information has started to be used for the accreditation of all business programs with ACBSP (Accrediting Council for Business Schools and Programs).

How can we improve our institutional results with CENEVAL? We are considering the possibility of returning to what was before compulsory for each student prior to finishing the degree--passing the EGEL exam.

In the Summary Data Form the following are significant data comparing 2009 and 2011:

- (a) A decrease of 42 students at the undergraduate level.
- (b) Percentage of graduation in the Summary Data Form 2009 was 66% vs. 59% in 2011.

- (c) Registrations in the graduate program on June 2009 were 1,808 and June of 2011 the total was 1,363.
- (d) On June 2009 we had a ratio of professor-student of 37.3, and in June 2011 the ratio was 34.6
- (e) The institutional operating budget from June of 2009 to June of 2011 increased by \$3,071,003
- (f) Tuition fees in June of 2009 to June of 2011 increased by 25.9% for undergraduate level and a 28.6%.

The **Inventory of Concurrent Accreditations** (Data Table 8.1) tells us that the Tijuana and Mexicali campuses already have all of the programs accredited by CACECA (business), that Mexicali already has all the engineering programs accredited by CACIS, Tijuana is missing two programs to be accredited, and Ensenada has only one program in the process of accreditation (Industrial Engineering).

A recommendation is to promote the accreditations on the Ensenada campus; however, the institution is evaluating the continuation of all these accreditations by program at a system level since the cost is very high, the maintenance process is very expensive and most importantly, the methodology of these accreditations is very prescriptive. All the national accrediting agencies by program charge fees per each visit, per program, and per campus. Although one may have the same program on the three campuses, one is required to pay the same fee for each campus. It is for this reason that CETYS is evaluating the benefit and effectiveness of these accreditations.

In the last study of the 2008 alumni (portfolio of evidence # 15), the most significant results were:

*** What were the results of greater impact?**

- 70% of these alumni at the time of the consultation had been awarded the degree.
- 42% continued with subsequent studies to the bachelor's degree, half of them were undertaking master's degree studies.
- The majority of the alumni are happy with the bachelor's degree they studied (90%).
- The courses were in line with their undergraduate program (86%), less than 10% considered it regular or deficient.
- The courses of the undergraduate program were cataloged with the following attributes: well-planned and with prestige (87%), as something distinctive, three of every four students felt that it was required to study a lot, and its approach was very general (75%).

- Courses fostered skills (90%), mainly: analytical capacity and logic, ability to identify and solve problems, the ability to apply knowledge, information search, management of methods and techniques, technical knowledge of the discipline, and updated knowledge of the theoretical approaches. The skills least fostered were oral and written communication and knowledge of a scientific /humanist nature (75% -80 %).
- 9 of every 10 (90%) thought that the education and training were characterized by the ability to work as a team, critical thinking, facing challenges, a continual improvement, to develop independently, and to think creatively; the area where it was least emphasized was getting students interested in problems that affect society.
- Close to half of the alumni considered that most or all of faculty are an example to follow.
- The education given at CETYS was efficient (86%). Some of the shortcomings that were pointed out were the lack of equipment and materials.
- In the education of alumni, co-curricular activities were fostered (80%), these activities included conferences, seminars, and social and cultural activities.
- More than 80% of the alumni believe that the undergraduate program created competencies for work, and that it provided tools to work with and helped them find a satisfactory job.
- Two out of every three (67%) alumni worked during the final year of their academic program.
- When finishing the degree, 90% of our graduates had a job; of the 10% of graduates that indicated they were not employed, some were planning to pursue a graduate degree.

*** What have we done with the results?**

The results have been used directly in the review of academic programs, in the academies, and in the accreditation processes. This can be observed in particular as part of the Marketing and Business program reviews. Our faculty indicate that while these types of results were not a part of prior program reviews they now are and will continue to be included.

*** How have we shown the results?**

The full study was submitted to the College and School Directors across the three campuses so they could see both the positive aspects and areas of opportunity mentioned by those surveyed. It has also been sent to the academies and the results have been used as a source of information for the accrediting agencies of national programs.

The satisfaction surveys that CETYS University conducts each semester indicate the specific areas of services where we need to improve, options provided by the students at each campus. As a result of our learning from these studies (and our working with WASC), starting in 2009 we initiated a series of "improvement workshops" on the three campuses; each campus, not only is informed about the results, but needs to take improvement actions in the most significant areas that students indicate (portfolio of evidence # 39).

With regard to our **indicators of educational effectiveness** (Data Table 7.1), we have learned that the most outstanding areas are: critical thinking and clear and effective communication in Spanish.

How we have been learning to improve and what we lack:

From the first report received by the first WASC evaluating team that visited CETYS University (2007), the recommendation that CETYS should use more effectively all the information which it generated has continued to emerge in a consistent manner throughout the accreditation process with WASC. The institution finally realized the need for an information system appropriate to the needs of the academy. For this reason, in 2010 work began on the design of a new information system SICU, which began operating in the 2011-1 semester.

There are strategies for improvement that have emerged from all the recommendations received by all of the WASC teams that have visited CETYS. The actions taken as part of these strategies for improvement have been, for example:

- a) The launching of a new information system (SICU) in the 2011-1 semester. What we lack: that all faculty know how to use this system and to generate reports which they need, and that the reports are dictated by the needs of the academy.
- b) The attendance of academic staff from CETYS in specialized workshops on the topic of the use of data and information to ensure the success of the students in completing their academic program. The last one was in October 2011 in the city of Long Beach, California. What we lack: greater involvement of the academy in these types of workshops, and seeking the support of the institution for a larger budget to support such participation and professional development.
- c) Sought the support of external experts in academic processes as part of reviews of academic programs, assessment, and library. How we can improve: detect other areas of the institution that require improvement in their processes, whether

academic or administrative, or whether curricular or co-curricular. What is identified in the short term is to learn more about the "assessment" of co-curricular areas.

- d) Reflect on the use of data from the satisfaction studies, from the alumni studies, and from the "Data Tables." What we lack: make sure we are closing the loop in the improvement workshops, i.e. making sure that the improvements indicated by the students are being carried out on the three campuses.
- e) The information generated at the CEDES became more detailed and specialized for the purpose of improvement in retention and graduation rates. How to further improve: although the CEDEs are areas that have greatly improved in their effectiveness, it is necessary to hire more psychologists in the Tijuana campus and develop the CEDE at the Ensenada campus. The objective is to serve our students in a more effective way, with enough trained personnel.
- f) Great efforts were made by the Directors of Schools of the Tijuana campus in the program of "tutoring faculty." Now the program has been extended to the Mexicali campus and it is expected that Ensenada will start it in the 2011-2 semester.

6. - HOLISTIC COMPONENT.

Although there have been several overarching components that have formed CETYS University during its existence, in the past seven years, as part of the WASC accreditation process, two have emerged: "culture of evidence" and "refocusing on excellence."

The intention of the founders of CETYS University was clear and firm: to create an institution of the highest academic quality that would lead to graduates who would contribute to the development of the region's economy and community in an important manner. Throughout 50 years, the Presidents, Directors, and Faculty of the Institution have acted accordingly.

Learning outcomes, the existence of a faculty evaluation system, systematized institutional research, strategic planning resulting in a strategic plan every ten years, periodic review of programs, and the use of technology in the classroom are just a few examples of CETYS' culture. The list of these elements is extensive; in more than one of these the institution has been a pioneer in Mexico and Latin America. However, it has been through the WASC Accreditation process that the integration of these elements toward a common goal has come through: to be a sustainable institution of higher education, with the stamp of academic excellence.

During the past seven years we have assimilated a vision and a common language within the different actors in our educational venture: from the Board of Trustees, followed by the faculty and the administrative and supporting staff, the students themselves and even alumni - and in some small degree the community in general - have already become familiar with a new vocabulary which is integrated into the framework of reference for this WASC accreditation process; it is distinguished by

creating a culture of evidence and the commitment to continuous improvement. Faculty has been able to understand this philosophy and has come to exercise more frequently and in greater depth self-reflection in academic processes, especially in the review of programs.

As time goes by, we continuously review the strength of our educational model; our commitment to "teach" has been transformed into the commitment to promote "learning." The operation of the institution has moved away from an individualistic point of view, departmental, or silos to enrich itself with the clear understanding of the common mission. Even the most deep-rooted practices like the preparation of the budget and the less dynamic schemes, such as organizational structure, have been modernized accordingly. CETYS 2020, the corresponding financial plan, and the operating plan that stems from it, are a clear evidence of an interdisciplinary and team based effort to serve the students and the academy.

Support units for students and faculty in the institution understand today the role that in an aggregate way they play in support of educational effectiveness. The co-curricular areas have learned little by little to work in an integrated manner with a greater intention of supporting the students to ensure that they comply with all the requirements for graduation in a timely manner, and the most important thing is recognizing that the relationship between the academy and the supporting areas have a common purpose, educational effectiveness. Retention rates, graduation rates, and learning outcomes are critical to this effectiveness, especially within a culture of evidence and with the commitment to excellence.

The program review and the appropriate use of information collected through studies and internal research now make greater sense because they are understood as a real, direct, and practical way for improving the educational experience and the student's learning in CETYS. We have gone from the philosophy of improvement, where the actions were implemented because of "being right," to the real conviction to act based on analysis of learning outcomes, data analysis, and statistics by academic program because of the monitoring which CEDEs allow of students at risk, etc.

If the institution has been characterized by its ability to envision and plan, today it carries it out within a framework of greater relevance to align these processes to what we have learned during the last decade; in particular what we have learned over the past seven years in the WASC accreditation process and specifically by our commitment to act within a culture of evidence, and with a commitment to excellence in our educational mission, including curricular and co-curricular areas.

The evaluation of compliance with the institutional Mission, with the educational model, and with the new CETYS 2020 vision, have led to strategic initiatives that include everything that we must do to continue to reach a higher level of achievement in all of the recommendations that have been received from WASC, and support during the next ten years the institution's path toward sustainable academic quality.

As part of CETYS' commitment to the WASC process and the integrating components, we include the following examples in addition to the others that are in this and other reports that have already been submitted to WASC.

(a) Renewal of the agreement with California State University-San Bernardino (February 2011). In December of this year we are going to start a series of conferences in psychology with CSUSB faculty, thereby reinforcing our School of Psychology.

(b) Home-and-home visits with San Diego State University have led to greater collaboration in business and potentially in education (Spring and Fall 2011). Our faculty from Humanities and Social Sciences are engaged in conversation with their SDSU peers that might lead to research projects.

(c) An agreement was signed with Purdue University Calumet (July 2011) for a possible double degree in engineering. As part of the scope of collaboration, PUC has made available to CETYS its new center for innovation that will be linked to the emerging CETYS Center for Design and Innovation, which is part of CETYS 2020.

(d) Thanks to a generous multimillion dollar pledge by our Board Chair and his business group, CETYS has been able to launch the Distinguished Chairs and Distinguished Visiting Professors Initiative that has already led to several leading professors from abroad coming to CETYS to teach at a graduate level, provide advice to graduate students, enrich the development of our own faculty, establish linkages with business and government, and to provide lectures to undergraduate students. Although the effort was launched in Spring 2011, CETYS has already had in Baja California professors from the United States (i.e., Arizona State University, San Diego State University, Columbia University, University of San Diego), China (City University of Seattle in China), France (INSEAD), and Spain (Universidad de Murcia). In addition, through the regular visiting faculty program, additional faculty from other countries such as India, Finland, Australia, Korea, and Japan have come to CETYS.

(e) An agreement with the University of California at San Diego is in the works.

(f) An agreement with the Chicago School of Professional Psychology is being discussed that would lead to mutually beneficial activities involving primarily psychology faculty.

(g) Establishment of Centers of Excellence for each of our Colleges: College of Engineering (Design and Innovation), College of Business/Management (Competitiveness), and the College of Social Sciences and Humanities (Human and Social Development).

7. RESPONSES AND FOLLOW-UP TO THE RECOMMENDATIONS OF THE INSTITUTIONAL CAPACITY VISIT IN 2009.

Faculty

A. Continue with the plan to ensure sufficient trained academic staff (CFR 3.1).

Despite the fact that the institution had suffered extensive material damage at the Mexicali campus because of the April 2010 earthquake which will have great economic impact for many years, CETYS has committed to comply with the hiring of new faculty identified in the 2010 strategic plan; in the College of Social Sciences and Humanities from 2009 to 2010, 6 new professors were hired, and in the College of Engineering 17 new professors, a total increase of 8% between the 6 colleges.

Within an analysis per campus, the Ensenada campus from 2008 to 2010 only had 2 changes in its faculty. In the same period, the Mexicali campus also had only 2 changes in its faculty. Tijuana in two years had no changes in its faculty. At a system wide level from 2008 to 2010 there have only been 4 changes in the faculty. In other words, we have had very high faculty retention.

This year we had 6 new professors come on board in the three colleges with the degree of doctor or in the phase of completing the doctoral dissertation, complying with the institution's commitment to supporting faculty that has not finished their studies in doctoral program with CETYS University. Within the College of Engineering 3 professors presented their doctoral degree exam and received the degree of doctor; there are still pending 5 professors to take their exam. In the College of Social Sciences and Humanities, 4 professors who studied the doctoral degree in Education and Values are in the process of completing their doctoral dissertation, and in the College of Business 5 professors were able to present their exam and obtain a doctoral degree. Despite the fact that doctoral programs in CETYS University are suspended for the admission of new students, the institution continues to support faculty to conclude their studies.

A self-recommendation for us would be to be able to give faculty teaching time release for those who have not completed their doctoral degree studies so they can do so with greater ease, and be able to give faculty the opportunity to study abroad to increase the diversity of thought.

B. Continue with the development of a research culture at a graduate level and "scholarship" activities for faculty. (CFR's 2.8 , 2.9)

There was a very special interest in a group of faculty from both undergraduate and graduate levels who have participated in research projects and who have extensive experience in various research methodologies. For this reason, and with the goal to demonstrate before the members of the next evaluating team the most significant activity in the research and activities of "scholarship" that faculty of CETYS

University has carried out, we formed a "Task Force." This specialized group of academicians in research began the task of collecting and analyzing all the papers and projects carried out by faculty and students from 2008 to 2010. (Evidence # 53) This collection of research projects is impressive and deposited in a Blackboard repository of CETYS University.

The results of this process led us to satisfactorily conclude that in CETYS University there is a research culture at both the undergraduate and graduate levels; and in following-up the recommendations of the 2009 evaluation team, graduate research has increased dramatically due to the projects with CONACYT (Evidence # 11). These projects with CONACYT also have increased the participation of faculty who teach at the graduate level. All these analyses of information on research projects carried out from 2008 to 2010 are going to serve as a basis and background for the Centers of Excellence in the 2020 CETYS Strategic Plan; the Centers of Excellence include plans to develop research projects in greater depth with the purpose of increasing still further the participation of faculty.

- C. Greater participation of the Academic Senate to acquire greater responsibility in academic processes. (CFRs 1.3 , 3.11)

Following the recommendations of the WASC evaluation team in 2009, the Academic Senate set the task of participating in two main activities with great presence and academic rigor: the revision of the SERP (System of Evaluation and Compensation of Faculty - Evidence # 33) and to develop the regulations set forth in this academic organization. For the visit on educational effectiveness of 2011, CETYS University will have completed the selections of the next group that would form the Academic Senate. These selections were carried out during the month of September 2011 by following a summoning and voting process carried out at the 3 campuses. As part of the design of the norm of the Academic Senate, and seeing the implications of the line of work of the new president who began work in January 2010, it was decided to modify the name from Academic Senate to Academic Advisory Council with the objective of being more inclusive. The form of newly appointed Academic Advisory Council has been reviewed and approved by the Vice President of the Academic Affairs; the same one that promoted the voting process of September, 2011.

We can conclude that learning for CETYS University, having formed an academic organization of this nature such as the Academic Advisory Council, has been of great relevance because previous to the WASC visit in 2009 we had never had in CETYS such an organization. This led us to analyze and to learn that faculty can and must participate in processes and in decision-making at an institutional level and obviously at an academic level. The institution has analyzed the structure of academic senates from various universities in the United States in order to integrate a similar body in line with the mission and the institutional educational model (Evidence # 81).

- D. Strengthen and make the role of faculty more visible in the development and revision of strategic plans. (CFR 4.1). As the Academic Senate matures, it will have a more active voice in all areas, but it has already had a voice in the process of strategic planning.

Following this recommendation, a group of faculty participated in the review of what was the 2010 CETYS strategic plan (Evidence # 1.) As a strategy in the preparation of the new 2020 CETYS strategic plan, we applied a survey to a total of 2,250 participants, including faculty. Also faculty participated actively in the definition of the new 2020 CETYS vision. The evidence of greater participation of faculty in the design of the new institutional strategic plan is found on the web page CETYS 2020 where we include all the details of these working sessions. (Evidence #64 www.cetys.mx/2020)

We can make an analysis comparing the participation of faculty in the CETYS 2010 plan, with the 2020 CETYS plan, the participation of faculty was fostered, and it was more significant because they even participated in the definition of new vision 2020; in this way, the evidence that the 2020 CETYS plan is 90% academic demonstrates the institutional strategy of greater faculty participation.

- E. The Academic Board.

The Academic Board ceased to function as such from the last WASC visit in 2009 because starting on January of 2010 it was decided to integrate the functions of this organization, which were merely informative and operational, to the functions of the new Academic Advisory Council, which will have deeper and greater involvement in academic affairs.

Library and Learning Resources

To continue increasing procurement and resources for ensuring that they are sufficient and appropriate (physical and digital) in support of the undergraduate and the graduate programs, and to comply with the expectation that both students and faculty are actively involved in research (CFRs 2.2b, 2.3).

Responding specifically to the recommendations of the last WASC evaluating team, the institution began the task of thoroughly reviewing each of the recommendations by having regular meetings with the staff of the three libraries. Six main areas of action were identified:

- Increase digital and paper collection

The printed collection grew from 69,000 to 72,671 copies, and by adding to the 91,967 e-books gives a total of 164,638 at a system level.

From 2009 to 2010 the total collection grew from 154,478 to 164,638 with an investment on 2010 of \$280,000 U.S. dollars.

We continue with the agreements on interlibrary loan in both Mexico and the United States. In the United States we continue working with San Diego State University, and in Mexico with the Universidad Iberoamericana Noroeste; reporting an increase of 27 books in the 2009-1 to 229 books in 2010-2. Within the 2011-2020 library strategic development plan, we have included the hiring of a development collection coordinator as an institutional commitment to the improvement of libraries.

- The university should continue with the effort of developing in faculty the educational skills of information literacy.

The institutional commitment within the framework of the 2007-2010 library strategic plan was to develop and implement a program of information literacy directed to the entire CETYS community, including faculty training and the design of syllabi focused on Information Literacy (ALFIN) within the syllabi.

One of the most significant actions was the design and development of an Information Skills Certificate Course (DHI) for the entire faculty, including the adjunct faculty on the three campuses. This certificate course began in the year 2009 and to date, at a system wide level, 147 professors have registered in this course. Of these 147 professors, 43% are candidates to complete this certificate course before the end of 2011.

A reflection of learning with regard to this certificate course is the emergence with greater force in Mexico of the culture of information and the information literacy in the university environment.

As the development of information skills is an important point within the recommendations of the WASC consultant in 2007 (Ralph Wolff), CETYS University immediately set in motion an effort involving information literacy skills. To support these actions the Library Committee was created in 2009 as well as to continue to reflect on the topic. The institutional commitment for the improvement of information literacy is that 100% of faculty of CETYS University concludes this certificate program.

- Comply with the updating included in the 2010 Plan for Mexicali and Tijuana

Evidence #79 of the Evidence Portfolio includes information on all updating carried out at the campuses.

- Demonstrate the effectiveness of the relationship between faculty-student-library.

In the autumn of 2010, an academic project was started with several professors to strengthen the linkage of the academy with the library.

- Evidence in the training of staff of the libraries.

All the efforts that the institution made from 2009 to train faculty by means of various projects that initiated in the library are presented in evidence #74 and # 74-2. Within these initiatives there were courses for the development of information skills, courses in the use of e-books, and in the use of databases.

- Display the progress of the new Strategic Plan for the Library.

To display the new developments in the Library Strategic Plan, evidence #74 is presented. This document is called "Library Development Plan for the 2011-2020 period." For all the scheduled work of the 2011 year, we have included the library budget at a system wide level (Evidence # 74).

Academic Planning

Having the academic planning, led by the faculty and its leadership, as a component of the new strategic plan (Standard 4).

The presence of the academy was notably increased during the development of CETYS 2020. In the CFR 4.6 we explained in detail how this participation took place. The basis and essence of CETYS 2020 is academic plan, with all the colleges and faculty of the three campuses involved. As mentioned before, in May of 2011 CETYS University launched its "Distinguished Chair" and Distinguished Visiting Professor Initiative with faculty from coming from various universities mostly from abroad (U.S., China, France, Spain). In addition, other professors have been guest lecturers at CETYS including but not limited to India and Finland.

Important aspects of the academic planning are also the review of academic programs that have already started, and that it is expected to comply with in full in the year 2012 (Timeline for Program Review - Evidence # 80).

Learning Outcomes

A. To continue the work with the institutional learning outcomes and with the program learning outcomes. To complete the cycle, and to show evidence of the improvement at the time of the educational effectiveness visit. (CFR 2.5).

Being the process of reviewing academic programs a very important one, for the next Educational Effectiveness visit we can say that 2010 was a year where the groups called academies began to take more force in academic processes. The academies of the College of Business (Marketing and Administration) and the academies of the College of Engineering (Industrial and Computer Sciences), took the initiative of the process of reviewing its programs.

The academies analyzed the frame of reference for the revision of programs of WASC, attended three workshops offered by Dr. Mari Lee Bresciani, and on the basis of what they have learned, designed their own review methodology programs.

Both the College of Business and Engineering have requested the support and commitment of the Vice President of Academic Affairs in order to fulfill the action plans resulting from these program reviews (Evidence # 80).

- B. The team recommends that the university uses the system developed for the review of academic programs, and to adapt them appropriately for the assessment of co-curricular programs (CFR 2.11). The culture of assessment in CETYS University began to develop with greater emphasis in accordance as to how the WASC accreditation process was moving ahead. The institution developed its first plan for the development of learning in 2009; there were 4 institutional learning results set up, which were measured in 2010. These results show that the institutional assessment program needs to be improved; this conclusion was obtained at the time of carrying out the reviews of the programs.

In the co-curricular areas, CETYS University has informally measured and in a non-systematic way co-curricular areas; we can say that a significant aspect of the assessment culture was the assessment that was carried out by the Mexicali campus with respect to the induction programs for new students in 2010. (Evidence # 93)

Following the WASC evaluating team recommendation, a timetable has been set in order to measure the results of each of the co-curricular areas of the institution. Within this timeframe, by general consensus of the three campuses, we have initiated the work of the library assessment outcomes (Evidence # 62).

To proceed in a more effective way in the co-curricular areas, we are going to take as a reference the methodology followed for the review of academic programs.

* Note: we're missing the library assessment evidence.

- C. Appropriate data analysis and institutional information such as the results of the satisfaction study and statistics of retention and graduation must be shared with the academy and the areas of student support service, so they can use this information and develop their own assessment and continuous improvement processes (CFR 1.2). After the Data Tables of 2011 were generated, the Director of Institutional Effectiveness submitted these documents to the academic areas (schools and colleges), as well as supporting areas such as the CEDEs and the academic operations. The results of the satisfaction studies of 2010 were presented, and in addition improvement workshops were held at the three campuses in order to meet the recommendations of the students.

Items that Need to be Addressed

With respect to the Compliance Audit Checklist, the institution has given an answer to each of the documents listed below and the evidence was delivered to the evaluating team in the flash drive sent on August 25, 2011. Within these documents a more detailed version of the 4.6 document has been included where it describes the process for review and analysis of key data, including retention and graduation rates.

- 1.2.1 The retention and graduation rates must be publicly available at the time of the educational effectiveness visit, and in accordance with the CFR 1.2. This information is available for the CETYS community to see on page WASC-CETYS: wasc.cetys.mx
- 3.5.1 The operating expenses should be submitted in accordance with table 5.2b, operating costs: private institutions from the required data by WASC (Data tables). We have included these data in table 5.2.b with special format requested by WASC.
- 4.1.1 The operating plan (that exists as part of the strategic plan) must be provided for this point in place of the administrative operation results. The CETYS Operational Plan for the year 2011 is located within the documents submitted as evidence. This plan has been provided to the Academic and Administrative Directors.
- 4.6 Provide a narrative description of the process used to review and analyze key information such as retention and graduation rate. The description of the process of how they generate the retention and graduation data was included; now with the new information system (SICU) it is easier to generate all kinds of report by academic program. This information system, as explained in the educational effectiveness report, began operations in the 2011-1 semester. It is available to all faculty.

SECTION IV - PREPARATIONS FOR THE EDUCATIONAL EFFECTIVENESS REVIEW

1. Complete the work of clearly incorporating institutional learning outcomes in the description of each course. Faculty is aware of the institutional learning outcomes.
2. Complete the identification of a manageable list of learning outcomes for each one of the academic programs, and show evidence of curricular or educational improvement, or changes, including the use of the work of the students by means of measuring the learning outcomes of each program. The academies have developed the learning outcomes for each academic program and all the professors know them.

3. Faculty should have clearly identified the way the goals of general education are integrated into the courses of each one of the master's degree programs (CFR 2.2a). This has been a challenge because this is a cultural difference in the United States; however, an explanation has been given to all the professors what WASC has requested, and the evidence that CETYS has submitted to clarify this point before the evaluating team.
4. Demonstrate progress in the increase of library learning resources (CFRs 2.2b, 2.3). Heavy investments have taken place, and the guidelines that began with the first recommendations received from the first evaluating team that visited CETYS in 2007 have become part of the new 2020 CETYS Plan, and financial resources will be applied each year to continue with the development of this area.
5. To learn and to understand a culture and the assessment process, and in addition to analyze and implement the assessment process. (CFR 2.4).
Despite the progress to date, the assessment process has been a big challenge for CETYS. An effort was made to measure the institutional learning outcomes (2008-2010), and improvement areas have been detected for the process, which were identified by the academy. However, the assessment from the teaching task carried out by the professor in the classroom has had successful applications for faculty and very satisfactory learning for the students in the use of rubrics and the e-portfolio. The students have confirmed that the pedagogical strategies of faculty are being innovative for their benefit. The use of the e-portfolio has increased dramatically.
6. Financial reports need to follow the typical line in all their details in compliance with the WASC formats, so that the future evaluating teams can quickly see the expenses in each one of its categories, such as instruction, library, and research. (CFR 3.5).

The financial area of CETYS has been distinguished by always presenting all the information required in each one of the corresponding sections; both within the "Compliance Audit Checklist" as well as with the portfolio of evidence, such as the "Data Tables." The Vice President of Administrative Affairs works closely with the external auditing firm. We present the results of the audited financial statements from the year 2009 and 2010.

7. To continue with the efforts of developing an appropriate research culture at a graduate level, and to present evidence of faculty "scholarly activity." (CFR 2.8). A revised version of the evidence for the 2.8 (Revised) of the "Compliance Audit Checklist" has been prepared. This document shows in detail all the events that the academy has carried out and that is considered as "Scholarly Activity."

8. To show evidence that in the 2020 CETYS plan there was participation by faculty and students in the development process of the plan. Evidence is presented on faculty participation.
9. The team asks CETYS to continue the review process of academic programs and to complete several cycles at the time of the educational effectiveness visit, including the use of external auditors. (CFR 2.7) The team expects to see evidence of the improvement in the programs as a result of these revisions. In Section #3 of this Supplement of Educational Effectiveness we present in detail the experience of faculty involved in the review of programs, the challenges encountered when working under the framework of reference for a review of WASC programs, the achievements and the learning achieved, as well as defining what needs to be done.
10. Demonstrate the evolution of the participation of the Academic Senate. From 2011 on, under the new President of CETYS, the Academic Senate evolved and became the new Academic Advisory Council, where you will see greater participation of the academy of the three campuses, as well as having extended themselves to include the participation of academicians from the high schools.

CETYS PRIORITIES BASED ON OUR STRATEGIC PLAN: CETYS 2020

Priorities for the next five years:

CETYS 2020 sets out very clearly the institution's vision and aspirations. CETYS University has set the task of fostering the initiatives that emerged based on the recommendations of the last visit of WASC in 2009, and in the new development strategy from a new President toward the academic aspects of sustainability. These recommendations of the 2009 WASC evaluating team, and of the Accrediting Commission, focused mainly on academic aspects of great relevance such as academic planning, a more significant faculty role in the institutional life and academic processes, the library, technology, and the use of data and information, which led the institution to structure CETYS 2020 as essentially an Academic Plan. This plan was revised and adopted at all levels, including by the Board of Trustees of CETYS University.

The CETYS 2020 Vision states that: **"CETYS University will be an institution of high academic quality, globally competitive, functioning as a learning community, and recognized by its actions and results within a framework of sustainability."** CETYS will remain committed to its Mission and high quality programs, seeking to enhance its proven regional and national standing to one that has international recognition.

These approaches led to 6 educational objectives:

1. Promote a high-level quality faculty that enriches the tasks of teaching, research, and extension, with focus on assessment and the use of technology.
2. Continue its focus on the development of the whole person, therefore: it will continue to promote the holistic training through an educational model focused on the student with a systematized display of its differentiating elements, and a student life rich and diverse in favor of student learning.
3. Operate a multi-campus system with a consolidated infrastructure. The institution will focus its development toward organizational sustainability.
4. Integrate the best technological platforms and systems in support of educational programs and services.
5. Promote innovation and diversify its educational offering and the delivery forms.
6. Diversify funding.

Based on the above and the initiatives described in CETYS 2020, the priorities are focused on:

1. Having high quality faculty, which means more professors who have the doctoral degree level. This is in addition to enhancing the development of faculty in terms of professional and training education (to take relevant training initiatives for the education of doctors, faculty hiring, etc.).
2. Strengthen the development of the whole person, focusing on the learning of students, through learning communities, and in the continuous improvement of services offered (the following initiatives become relevant: review of programs, assessment of learning, faculty participation in the academies, etc.).
3. Maintain an optimal student population size growing annually an average of 4.3% between 2011 and 2020.
4. Strengthen the infrastructure of the campuses (buildings, classrooms, laboratories, etc.).

In the recent (September 2011) 50th anniversary celebration of CETYS University, for example, it was publicly announced that the state government would support CETYS with several new buildings over the next ten years.

- 5, Strengthen technological services (Blackboard, Web site, online portfolio, Internet access, library services, etc.).

The foundations for and most of the initiatives of CETYS 2020 are of an academic nature, so without a doubt this development plan is an academic plan.

- **What are the recommendations that the institution should take, based on the 2011 Educational Effectiveness report?**

The WASC CPR recommendations were considered and integrated into the priorities and initiatives contained in CETYS 2020. To cite a few examples (p. 29 of the Development Plan): the recommendations to increase faculty and its level addressed in the initiatives; strengthening the library is addressed in several initiatives both in the nuances and in the infrastructure; and the recommendation on reviewing programs is addressed in the review initiative programs and in assessment. The same thing happens with the recommendation to strengthen the information system and the use of data, etc. are where the institution will continue to focus its efforts all these topics, plus some others.

The use of WASC standards and the experience of the WASC accrediting process throughout the past seven years have helped CETYS not only meet but exceed similar standards being used in the equivalent accrediting process implemented by the Mexican Federation of Private Institutions (FIMPES). Specific areas include greater integrity and transparency, a more inclusive planning process, hiring more and better academically prepared FTE faculty, increasing channels and conduits for faculty participation in academic and institutional decision making, shifting from a focus on inputs to a concern on and extensive work regarding educational effectiveness, a better understanding and articulation of assessment, an enhanced program review process, an overall improvement of library and other relevant learning resources (e.g., Library/Information Center), more attention paid to appropriate documentation of policies and procedures as well as practices, and an increasing awareness about and commitment to academic quality on the part of the CETYS Board of Trustees (IENAC). And as the process with WASC has moved forward and the degree of inclusiveness has increased, more and more there is a shared sense of pride of what has been accomplished up to this point. Most importantly, we firmly believe that we have a more solid foundation upon which to continue to serve and offer quality programs to our students in Northwest Mexico.